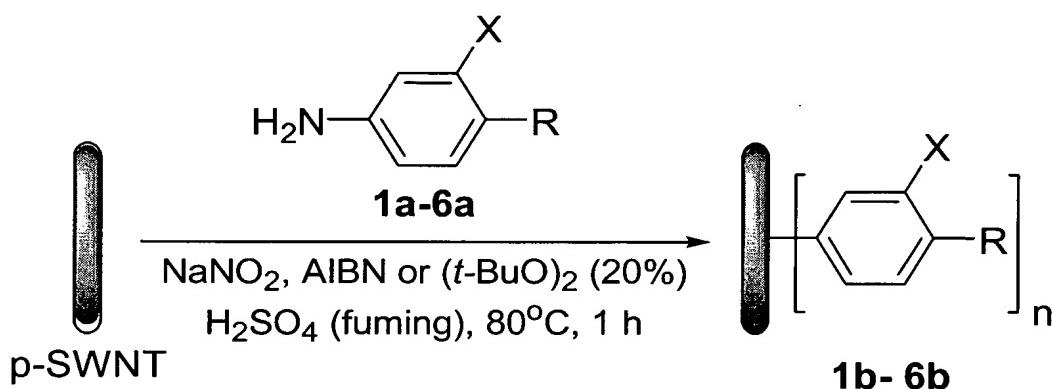


Scheme 1

- 1a.** $\text{R} = \text{H}$, $\text{X} = \text{H}$ to **1b.** $\text{R} = \text{SO}_3\text{H}$, $\text{X} = \text{H}$
- 2a.** $\text{R} = \text{NO}_2$, $\text{X} = \text{H}$ to **2b.** $\text{R} = \text{NO}_2$, $\text{X} = \text{SO}_3\text{H}$
- 3a.** $\text{R} = \text{Cl}$, $\text{X} = \text{H}$ to **3b.** $\text{R} = \text{Cl}$, $\text{X} = \text{SO}_3\text{H}$
- 4a.** $\text{R} = t\text{-butyl}$, $\text{X} = \text{H}$ to **4b.** $\text{R} = t\text{-butyl}$, $\text{X} = \text{H}$ and SO_3H (~1:1)^a
- 5a.** $\text{R} = \text{CH}_2\text{CH}_2\text{OH}$, $\text{X} = \text{H}$ to **5b.** $\text{R} = \text{CH}_2\text{CH}_2\text{OH}$, $\text{X} = \text{SO}_3\text{H}$ ^b
- 6a.** $\text{R} = \text{SO}_3\text{H}$, $\text{X} = \text{H}$ to **6b.** $\text{R} = \text{SO}_3\text{H}$, $\text{X} = \text{H}$

Fig. 1

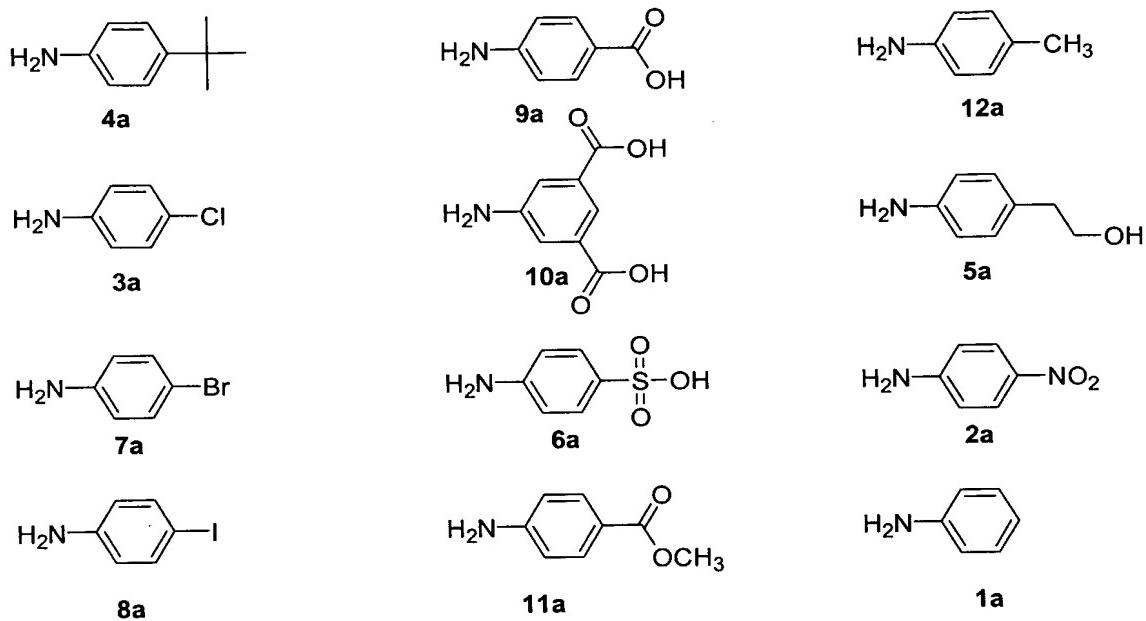
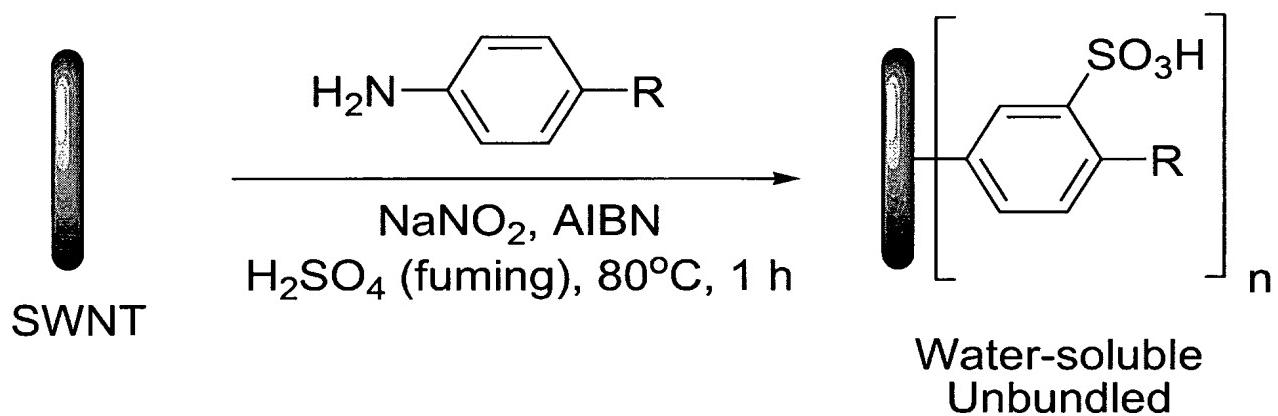


Fig. 2

Scheme 2**Fig. 3**

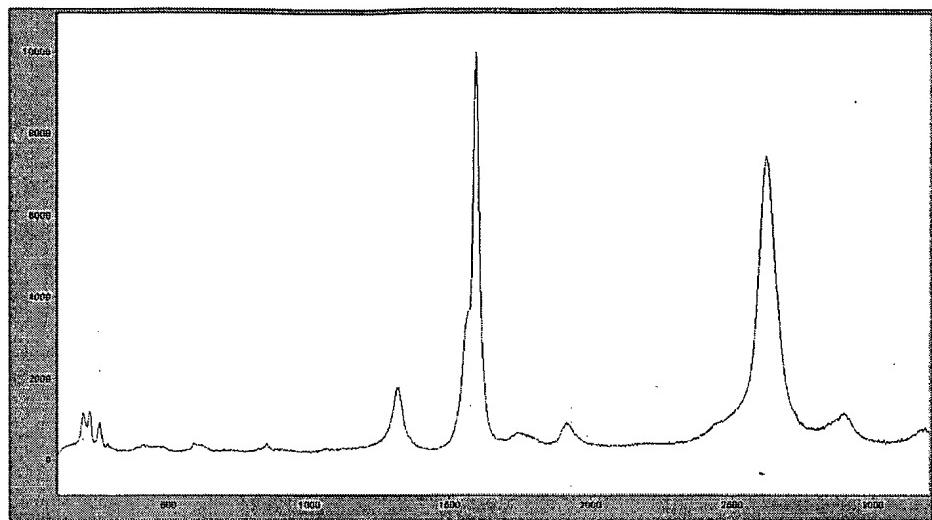


Fig. 4

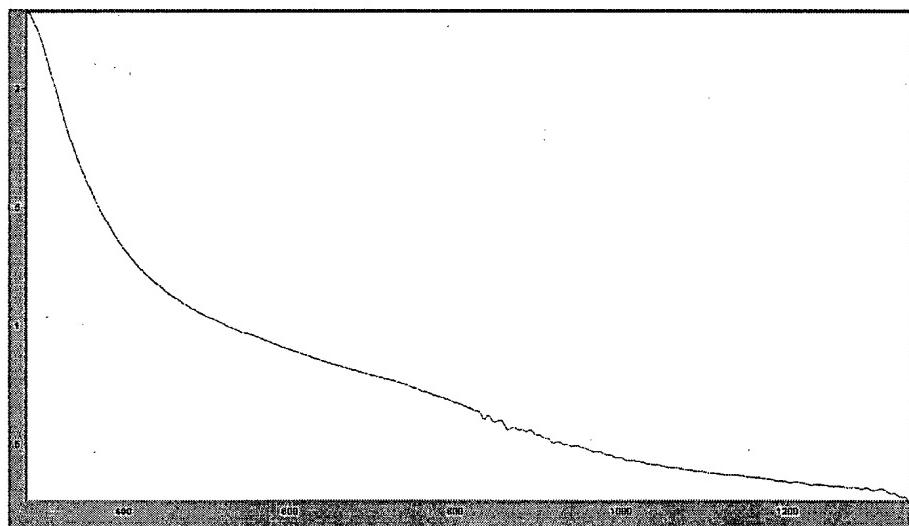


Fig. 5

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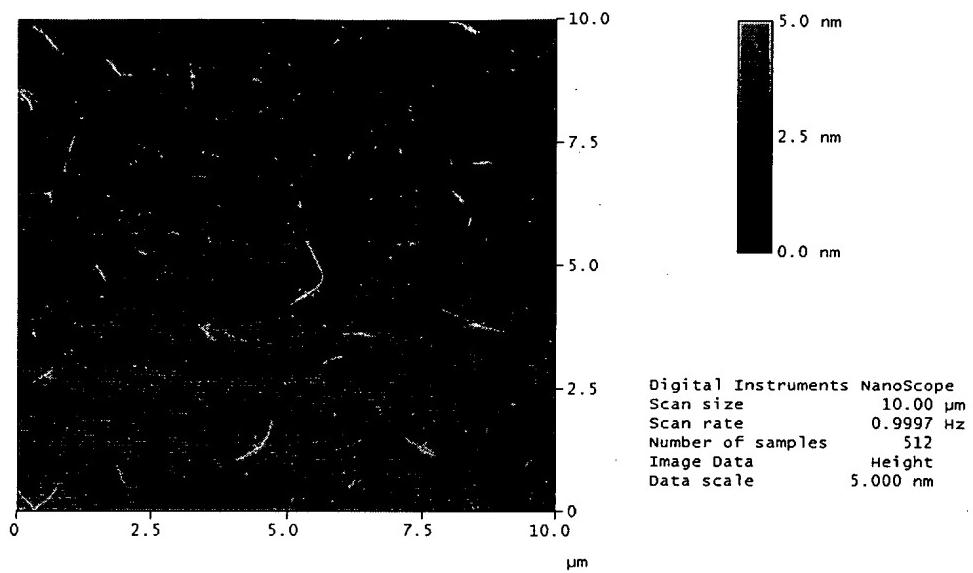


Fig. 6

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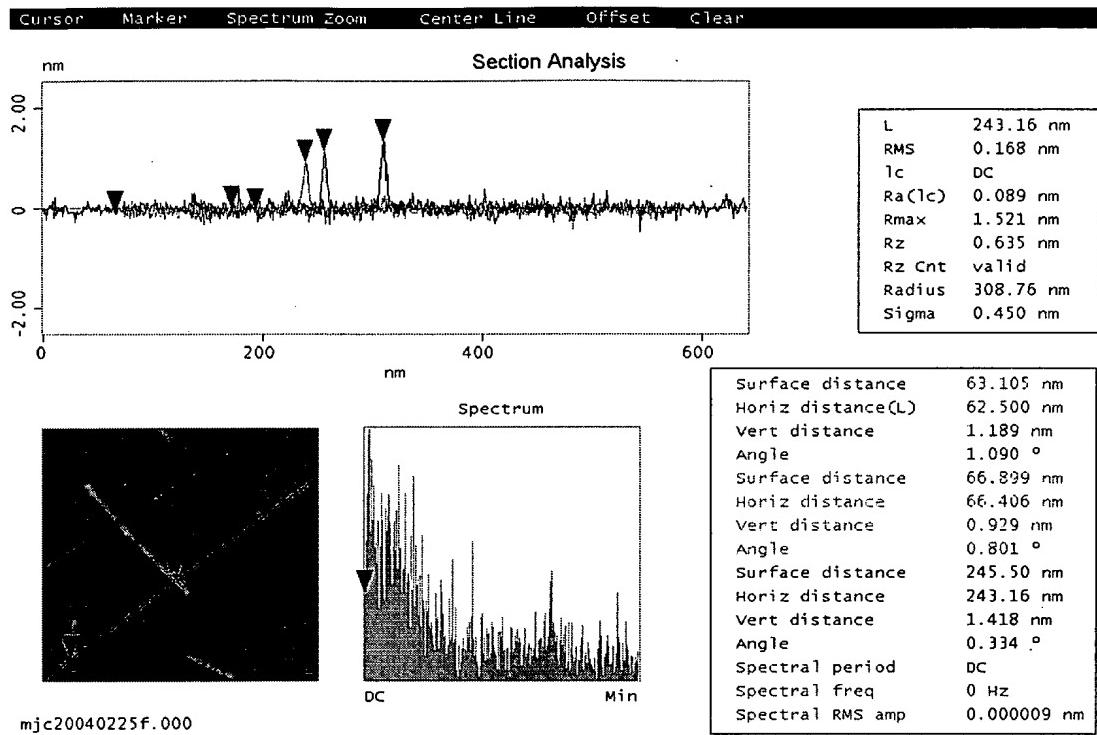


Fig. 7

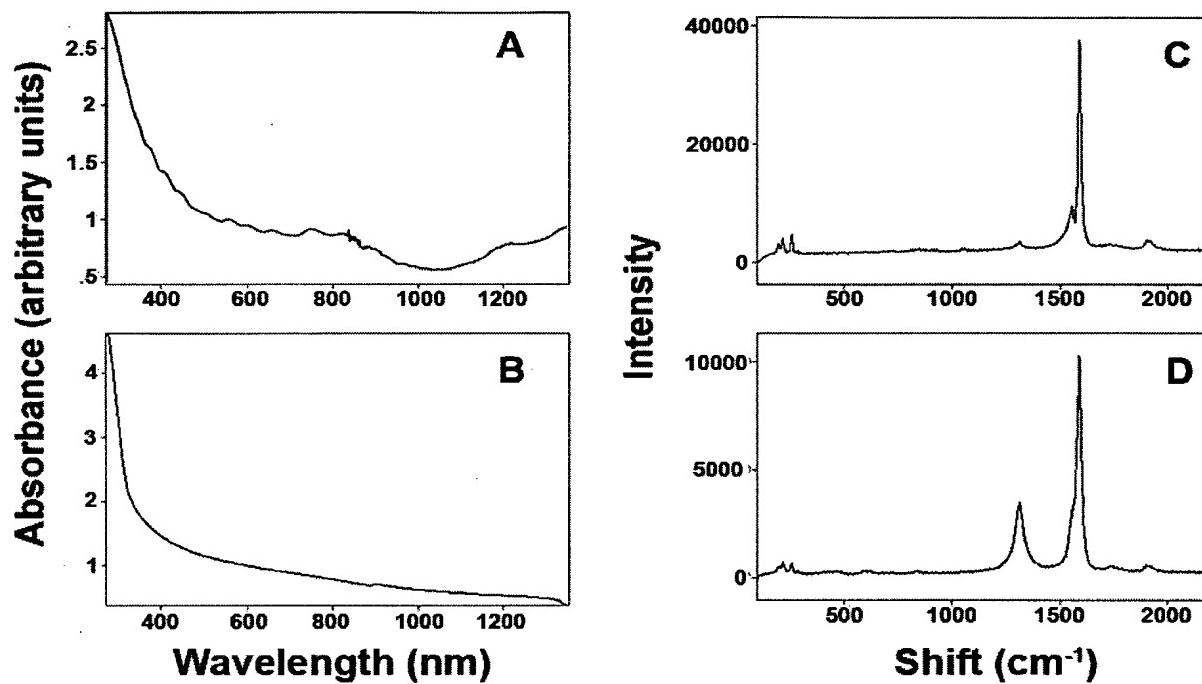


Fig. 8

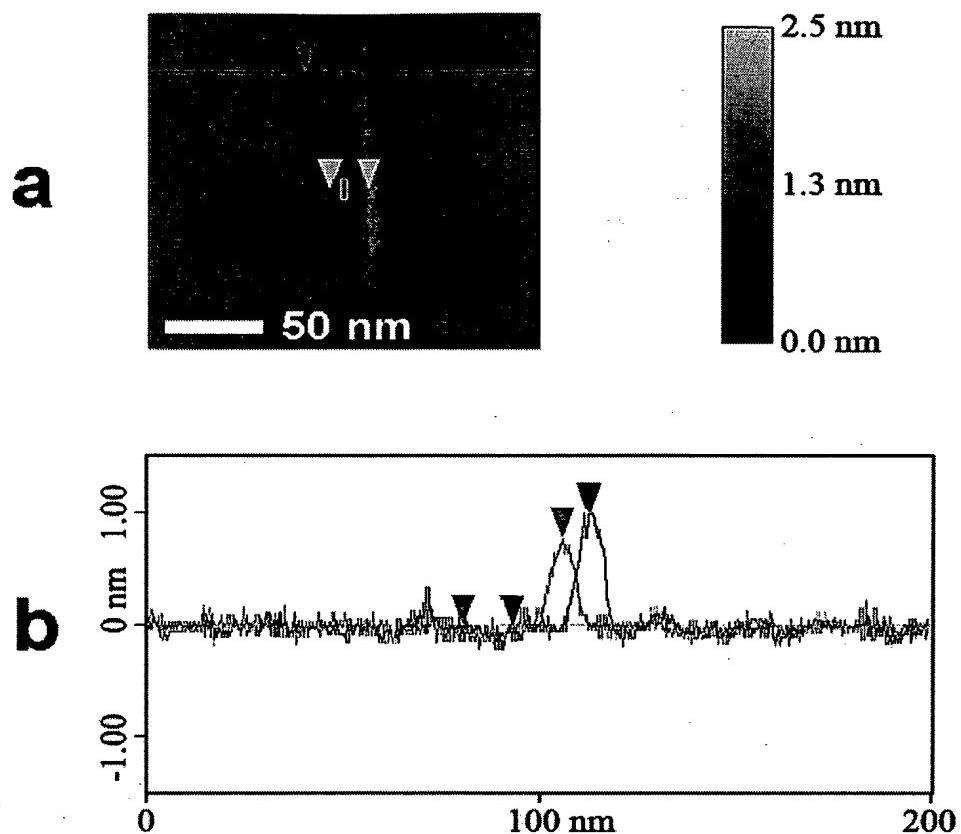


Fig. 9

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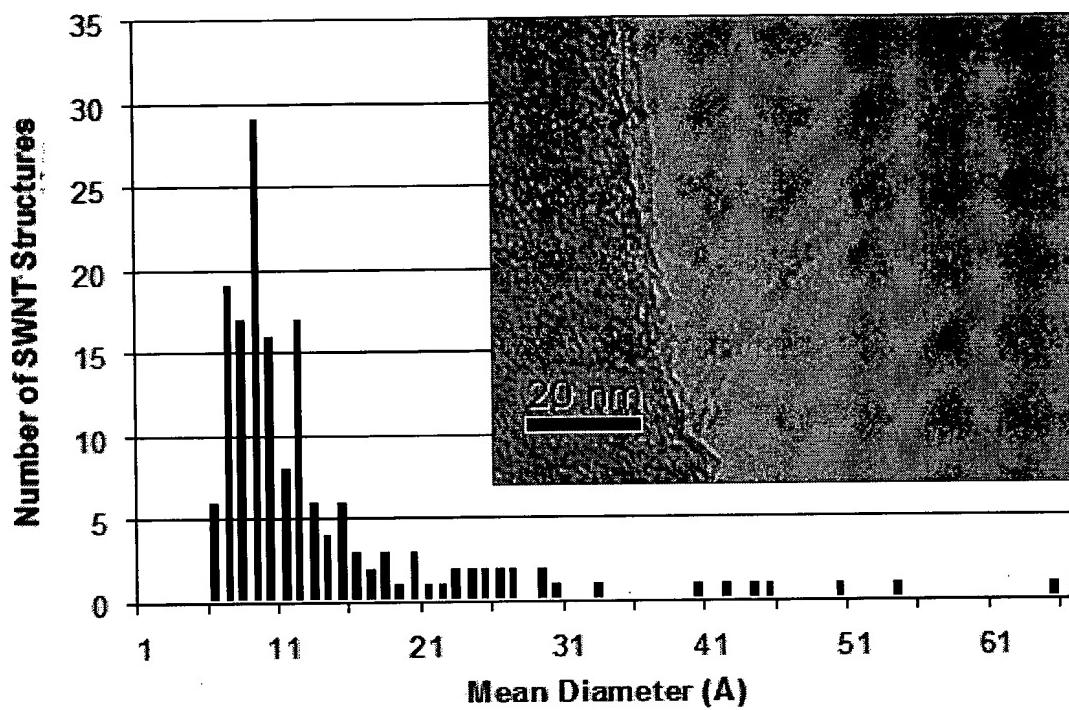


Fig. 10

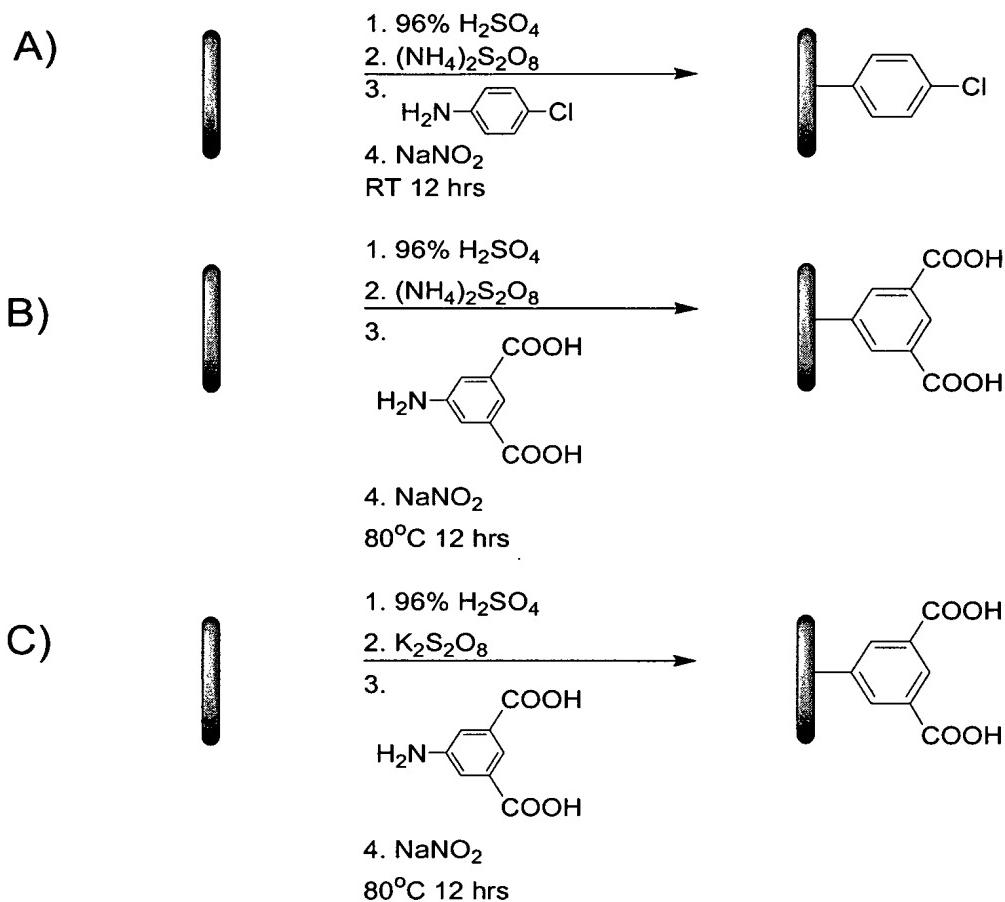
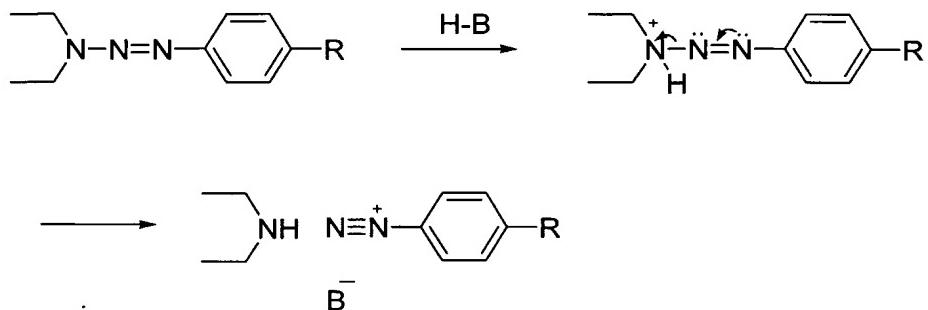
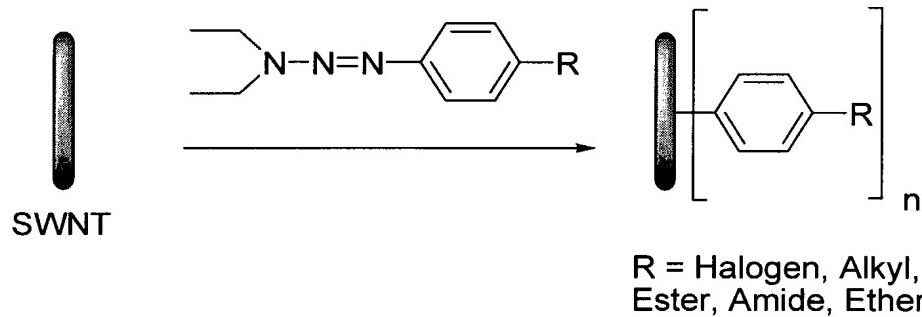


Fig. 11

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Scheme 3 $H-B =$ Acidic Media**Fig. 12****Scheme 4****Fig. 13**